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Introduction to Adaptive Surfing: A Pool Program to Promote Engagement, Safety, and Confidence

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Introduction to Adaptive Surfing: A Pool Program to Promote Engagement, Safety, and Confidence

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Background

People with spinal cord injuries (SCI) experience increased mobility and self-confidence; greater stamina, sense of freedom; and relief from chronic pain while immersed in water (Graćanin, Medjedović, Mekić, Mavrić, & Obreslikov, 2012) Evidence shows the benefits of water for this population, including increased proprioception, independence, & ease of movement as well as decreased pain & stress due to properties of water, such as sensations of weightlessness due to decreased effects of gravity, buoyancy, & hydrostatic pressure (Conatser, 2007; Graćanin et al., 2012; Wall, Falvo, & Kesten, 2017).

Problem

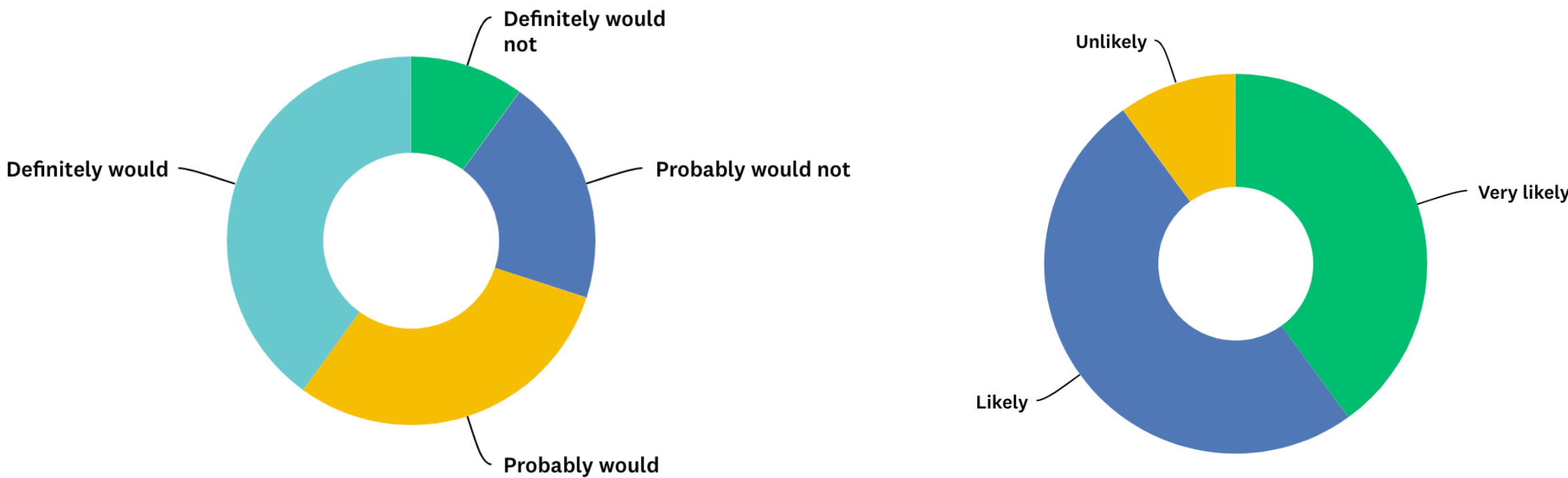
Mental health concerns associated with SCI include depression. The literature reveals that depression is highly correlated with SCI and a person is 3x more likely to commit suicide within the initial 2-6 years post injury. People with SCI report desiring greater access to resources and programs to promote inclusion amongst peers (Canedo, Rosenzweig, Santos, & Ventura, 2006). Currently, learn-to-swim programs are available to the general public; however, organizations are lacking aquatic programs tailored to those with SCI who need to re-learn how to swim (Pedro de Morais & Massoli Rodrigues, 2018). There seems to be a deficit in the availability of surf coaches or training programs with specific disability expertise to adapt this occupation to an individual’s needs (Lopes et al., 2018; Pedro de Morais & Massoli Rodrigues, 2018)

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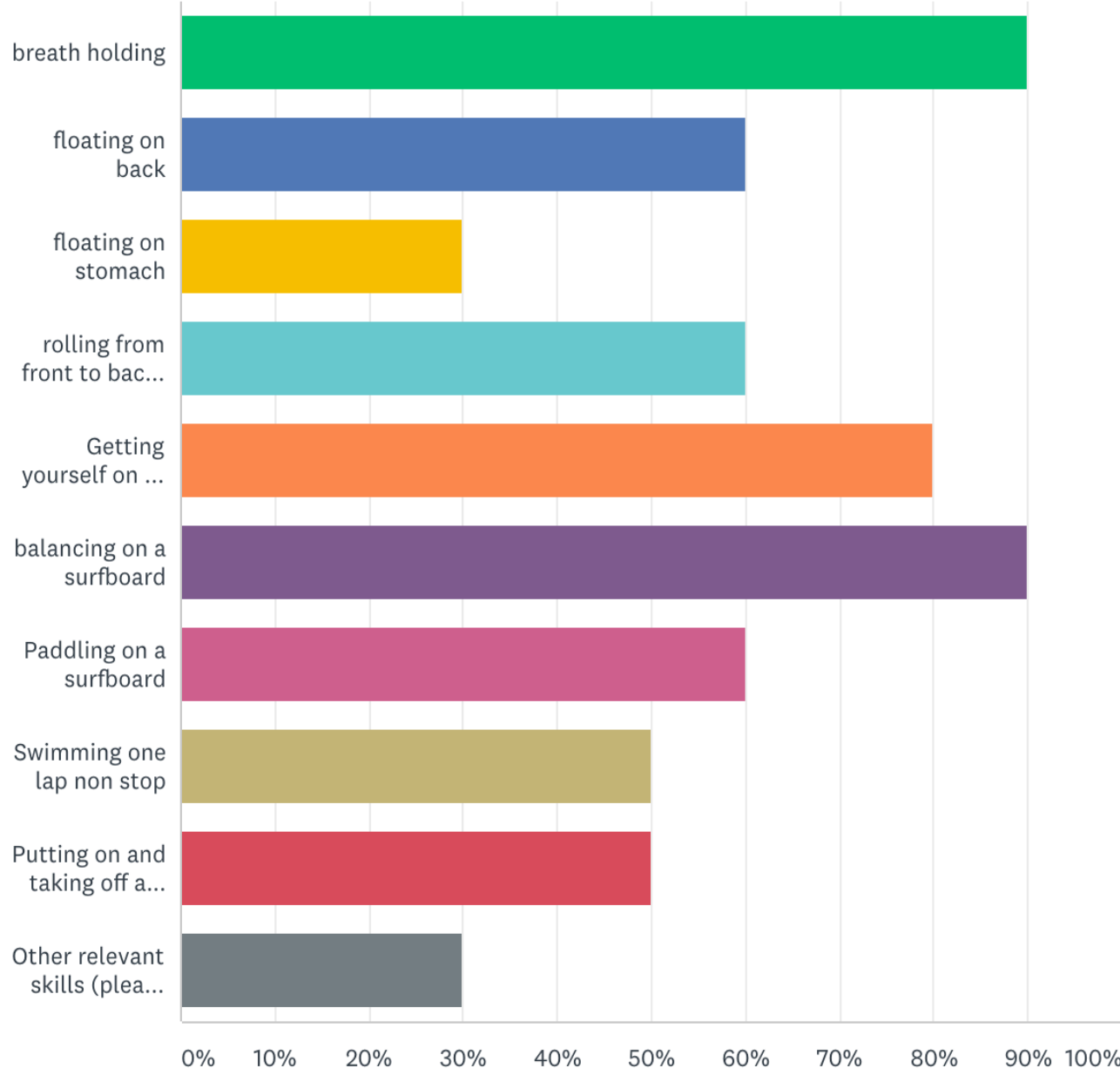
Results

Ten participants completed the needs assessment survey, supporting the interest in a pool-based adaptive surf program for people with SCI. This resulted in the creation of an Introduction to Adaptive Surfing: Pool Skills Program consisting of six sessions focused on building the skills outlined in the bottom left graph, in addition to skills mentioned in free-response questions.

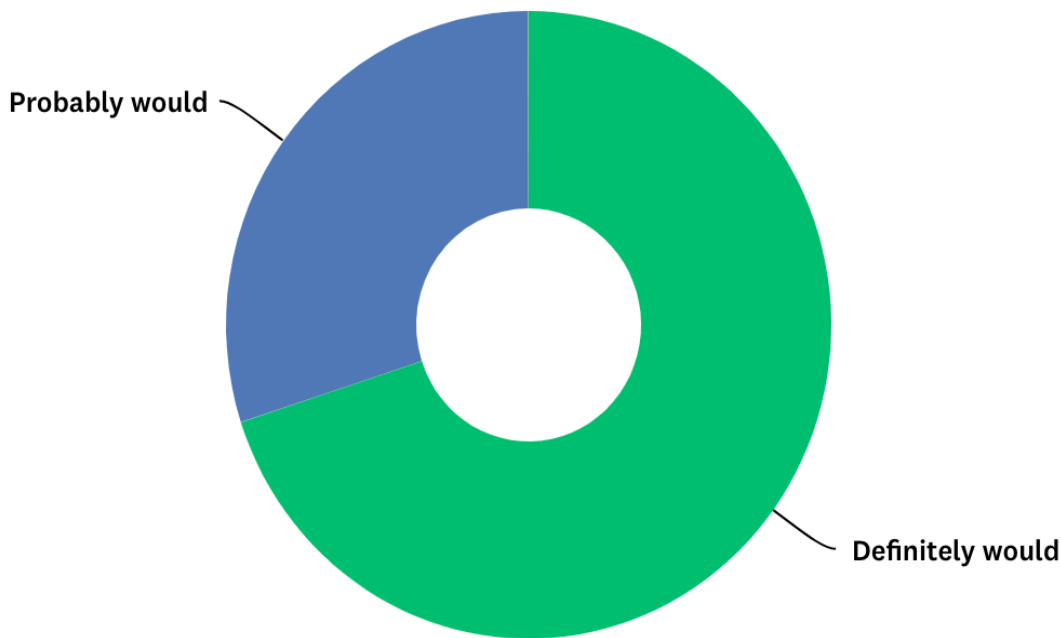
When asked, “Would you have appreciated more guidance when first learning how to surf with a spinal cord injury?” 70% of participants agreed that they would have, while 90% say that when first learning how to surf with a SCI they would have been likely or very likely to enroll in a learn to surf pool program to develop foundational skills.



Foundational surf skills that adaptive surfers report would be beneficial to learn in a pool before attempting in the ocean:



100% of respondents agreed that they would recommend an introduction to adaptive surfing pool skills program to a beginning surfer if it could improve safety in the water, provide them with more confidence, and improve balance, strength, and endurance.



Canedo, K., Rosenzwei, S., Santos, M., & Ventura, A. (2006) Life rolls on research, design, and evaluation: A study to increase the quality of life of individuals that have sustained a spinal cord injury. University of San Diego.

Conatser, P. (2007). Adapted aquatics and rehabilitation: a literature synthesis. International Journal of Aquatic Research & Education, 1(3), 242–254. Retrieved from http://search.ebscohost.com.prx-usa.lirn.net/login.aspxdirect=true&db=s3h&AN=26080_247&site=eds-live.

Gračanin, I., Medjedović, E., Mekić, H., Mavrić, F., & Obreslikov, D. (2012). Effects of swimming within disabled persons. *Research in Kinesiology*, 40(1), 37–41.

Lopes, J. T., Masdemont, M., & Cruz, G. (2018). Adaptive surfing: leisure, competition, or therapy? *Brazilian Journal of Education, Technology, and Society*.

Pedro de Morais, M., & Massoli Rodrigues, G. (2018). Strategies to teach swimming to people with spinal cord injury (SCI). *Motriz: Revista de Educacao Fisica*, (4). <https://doi.org/10.1590/s1980-6574201800040006>

Wall, T., Falvo, L., & Kesten, A. (2017). Activity-specific aquatic therapy targeting gait for a patient with incomplete spinal cord injury. *Physiotherapy Theory & Practice*, 33(4), 331–344.

Methods

This project aimed to ascertain the adaptive surf community’s perceived value of a pool program for individuals with SCI to develop surf skills in a safer and more controlled environment than the ocean. Data was gathered through an anonymous online survey, which consisted of ten questions (multiple-choice and open-ended) regarding surf training and surf skill building. Participants were gathered via social media through the ISA World Para Surfing Network’s Facebook page. The results were used to inform the design of an Introduction to Adaptive Surfing: Pool Skills Program.

Recommendations

- Partner with an aquatics facility to implement the program
- Trial and pilot the program using volunteer participants with SCI
- Interview the participants following the trial to gather feedback on their experience with the program
- Make revisions to the program based on trial feedback
- Advocate for the program to expand nationwide through aquatics facilities
- Survey current adaptive surf program leaders to see if they agree there is a gap in specific disability expertise within their programs